Index as presented to Lamoine Appeals Board March 12, 2018

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Jeffrey R. Dow, CPA Trustee, The Tweedie Trust PO Box 30 Ellsworth, ME 04605

April 6, 2017

Dear Jeff,

I wanted to review the status of the Jordan River property that you have listed with me at The Davis Agency for The Tweedie Trust.

We currently have the property listed at \$120,000 as per our prior discussions.

I removed the For Sale sign over the winter because of the plow trucks, but will replace it now that the snow has gone.

I read in the Ellsworth American in the past few weeks that Harold MacQuinn, Inc. is going to reapply with the Lamoine Planning Board to expand the Kitteradge pit, after having been denied a permit the first time as a result of a court settlement.

As an abutter, I assume you have been notified of this action by the town. MacQuinn wants to expand his current pit another 44 acres, and all of Cousins Hill would be removed, bringing the entire operation much closer to your property. This would take away all the protection the hill now provides your property and would create more industrial activity next to your property.

Should the Lamoine Planning Board approve the permit, I believe it will have an adverse affect on the sale of your property, as well as the entire Lamoine Corner area. This neighborhood has a number of old homes and is very residential.

The market typically picks up in the spring season, so I am hopeful that we will have some interest in your property. This is especially important with the unfolding events regarding the MacQuinn gravel pit expansion.

I will keep in touch if there is anything to report regarding this matter.

Please contact me with any questions you may have.

With best regards,

Marc Chalfoun Broker, ABR, CRS

Cost Copy

Catherine de Tuede 45 Meadow Point Rd. Lamoine, ME 04605 detuede@roadrunner.com

January 7, 2013

To: The Lamoine Planning Board

Re: Application for 110 acre gravel pit by Harold MacQuinn, Inc.

The Lamoine Gravel Industry:

-Is disproportionate in size and scope in relation to the residential character of Lamoine.

-Will total over 400 acres of mined land in Lamoine if the MacQuinn gravel pit is approved.

- -400 acres of mined land will be equal to 40 percent of Lamoine's 994 housing units.
- -Has lowered and eroded capital land value of the entire town by permanently removing 400 acres of land for residential development. 400 housing units with an average value of \$200 thousand could add about \$800 thousand to Lamoine's current yearly tax revenues of about \$2.8 million.
- -The municipality has the power of taxation, but the Lamoine gravel industry has been undertaxed, taxing land value, rather than product value.
- -In 2012 MacQuinn paid \$13,400 (\$106 per acre) in Lamoine property taxes on about 127 mined acres.

-In 2010 and 2011 MacQuinn grossed an average of about \$1 million per year on these 127 mined acres (Aggregate-\$15-\$20 per Cubic Yard) or about \$8,500 per acre.

-We can estimate that 375 actively mined acres would gross about \$3 million of aggregate, but would contribute only about \$40 thousand in Lamoine property tax revenues.

-The gravel industry in Lamoine lowers property values in different ways. My Realtor Joe Wright with L.S. Robinson sells and rents properties in MDI, Trenton and Lamoine. I quote him with his permission:

Tomparing two identical houses on two identical lots, the closer the proximity of the property to a gravel pit, the lower the value will be."

"If property is purchased with prior knowledge of the proximity of a gravel pit, then that is a choice, however; when a gravel pit is started or expanded after the purchase of property then that is beyond the property owners control. In the latter case owners can either sell out to the gravel company or sell at a lower price if they can sell their property at all."

"Because Lamoine has so much unprotected land zoned Rural/Agricultural this lowers overall property values in the town because there is no protection from mining encrochment. Lamoine must decide what the Highest/Best use is and Zone to that use. Commercial lots can be spot zoned as existing exceptions." As quote

Mr. Wright has informed me that as an abutter to the MacQuinn gravel pit, the seven acre property that is part of the original Nathan Hodgkins homestead and has been in my family for about 180 years will have less value if the MacQuinn application is approved.

*Data and estimates are accurate to the best of my knowledge and have been compiled using the following sources: MacQuinn Gravel Application, Lamoine 2012 tax records, 2010 US Census, 2011 Lamoine Annual Report, Aggregate Retail Sources.

ear Planning Board,

We are writing in regards to the Macquinn Application for a 100 acre or more gravel permit, where some of the proposed site is abutting residential homes. There are also numerous homes within 500 feet of the proposed site, which will be adversely affected. We are opposed to having a gravel pit so close to our homes, our place to feel peace, our place to embrace our families. Residents want to be able to go out in their backyards and feel safe, have peace, and have the quality of life we all strived for when we moved to Lamoine.

Residents on the Mill Road have had to deal with a gravel mining operation, that came within feet of a Mill Road resident's home, which was supposed to have been a place for a garage, but only gravel extraction occurred. After the land was stripped of trees and the excavation began, many residents could hear the mining, excavators digging, the beeping of the dump trucks backing up, the pounding of a dump truck tailgate, and on the other end of the pit, the grinding of gravel being screened; which sounds like glass being crushed for hours on end.

The 2011 Gravel Ordinance Section 7 also states, "Gravel mining will not adversely affect surrounding properties." When most residents moved to the Mill Road, there were no gravel mining operations near homes. Dick King had built residential homes and for about 25 years it was peaceful, quiet, and what you would expect from a residential neighborhood. We do not want more mining happening near the Mill Road because of noise, dust, quality of life, and the potential of water contamination to the Spring. The 2011 Gravel Ordinance Section 7 states, "Will not unreasonably result in unsafe health conditions." The noise, stress, and dust is unhealthy for people living near a mining operation. Having a hole 60 feet deep is no way a safe condition behind residential homes. Many residents along the Mill Road, and 184 have felt the impact of not being able to sit outside their home because it is just too noisy because of the beeping of the dump truck, the xcavator digging, and/or the stripping of trees.

Another issue is marketability of our homes. If someone is looking to buy a home, having a gravel operation near a home is a definite reason to look else where. A son of one our residents wanted to buy a house in Lamoine, but decided to buy a home elsewhere because of the threat of a gravel pit coming near his home. We urge the planning board to think about adverse effects to landowners surrounding this operation. The effects are life altering and will never be able to be reversed.

We have already endured what gravel mining on one side of the street can do to the quality of life, please don't add more intrusion and hardships in our lives. We know first hand what mining can sound like and it is loud, adds dust to the air we breath, and many of us have to wash our screens every couple of weeks. There is also stress of not knowing whether to sell one's home before another mining operation begins. We moved here because it was a residential setting; not an industrial setting.

Our quality of life will be ruined for generations to come. There will be no end in sight if this application is approved. There will never be peace and quiet, there will never be clean air, there will never be a comfortable place to call home.

Yours truly.

Mill Road Residence

Anth Rollet Yz

docs.google.com/document/b/1yAZX1x3inqcnqmEmicXTi6JEzVblU4OVPYHpbLgoUHE/edit

September 7, 2017

Regarding the Kittridge Pit Expansion application before the Lamoine Planning Board

My name is Nick Holt. My wife Sandra and I own 10.5 acres on Douglas Highway (Map 3, Lots 36 and 36a). The driveway to our property is about two hundred feet from the entrance to the Kittridge gravel pit on the Manring property. I understand that our property is not officially an abutter to the Kittridge gravel pit in spite of our proximity to it, but the present excavation is clearly visible from our property and definitely within earshot.

My wife and I have signed a contract with a local builder to erect our home on the property and we hope to be living there by next year at this time, so I feel my testimony should be included in this hearing. Therefore, I am writing to voice my strong objection to the proposed expanded gravel operations at the Kittridge gravel pit and ask that the application now before the Planning Board be denied.

- 1) It is well known that gravel pits decrease the value of property located nearby. Since my property is located within easy walking distance from the proposed Kittridge pit expansion, I can reasonably anticipate that the value of our investment will be eroded if the Kittridge pit is expanded.
- 2) Noise pollution from the existing Kittridge pit is already very noticeable from our property and expanding the pit will undoubtedly increase the level of noise pollution six days a week. The noise pollution is from both the pit itself and from the increased gravel truck traffic.
- 3) In addition to the noise that gravel trucks produce, these large vehicles are a danger to pedestrians, cyclists, joggers and smaller vehicles they encounter on our narrow Lamoine roads. An increase in gravel truck traffic can reasonably be expected if the Kittridge pit is expanded. And since my driveway is within a few feet of an existing Kittridge pit exit, my wife and I can reasonably anticipate an increase in the number of gravel trucks we encounter as we attempt to gain access to Douglas Highway from our driveway should this application be granted.
- 4) The additional dust produced from an expanded Kittridge gravel pit will expose my family to unhealthful conditions. Dust is a known trigger for asthma sufferers and my wife falls in that category. Although she is able to control her asthma attacks with prescription medication, the additional dust will undoubtedly cause her additional health problems.
- 5) Since our property is down-gradient of the pit, I fear that the quality of our well water might be compromised. Certainly, the destruction of the largest remaining esker atop Lamoine's sand and gravel aquifer should not be permitted to take place under any circumstances.
- 6) The beautiful hill that would likely be destroyed if the expanded pit is approved, marks the highest point in Lamoine and is the town's most distinctive landmark. As a child and youth growing up on the "Corner," I spent many hours on that sunlit summit watching the planes fly in and out of Trenton, identifying the various mountains visible on Mt. Desert Island and picking wild blueberries. To remove this geologically and personally significant landmark would be an irreplaceable loss to the community.

7) If Lamoine has a community hub, it has to be Lamoine Corner with the Lamoine Baptist Church, the Grange Hall, the Cemetery, the Fire House, the Lamoine Consolidated School and the ball field all within a short stroll from the proposed pit. The residents of Lamoine do not need and, according to Lamoine voting results, do not want yet another gravel pit to scar the natural beauty of our town - and certainly not one that would change the character of Lamoine Corner forever.

Sincerely,

Nick and Sandy Holt

113 Spring Rd Cherry Hill, NJ 08003-3025

September 23, 2017

Members of the Lamoine Planning Board,

Please include, as part of the public hearing record, my thoughts with respect to the proposed permit to allow Harold MacQuinn, Inc., to operate a gravel pit in the area known as Cousin's Hill.

My concern is the enforcement of Lamoine ordinances coupled with the demonstrated lack of trustworthiness on the part of MacQuinn, Inc. to abide by the spirit and letter of the law

As a part time resident for the past twenty two years I have personally experienced Lamoine government in action. Of particular concern is been Planning Board/code enforcement and the lack ability to depend on the implementation by each to act as the law intends.

I have nothing but the greatest respect for the individuals on the boards and commissions that make up the town government. They give freely of themselves in time, money and talent. Without them there would be total chaos. But, they also have personal and professional lives and obligations that must be met before they can even think of approaching an extra curricula activity such as serving the town. Nevertheless, they are amateurs and don't stand a chance when it comes to dealing with those who make it a practice to suck every advantage they think the law allows plus more as they play a game of "outsmart the local officials". In my opinion, Harold MacQuinn, Inc is the poster child for such behavior and the Asher Pit is an excellent example.

MacQuinn to Hiltz, Book 6531, Page 236. (Deed starts on p 233) recorded 2/26/2016

Reference may also be had to a Release of Right of First Refusal from Harold MacQuinn, Inc. of near or even date to be recorded prior hereto.

The Grantees, their heirs, successors and assigns, by acceptance of this deed, acknowledge that there is a gravel extraction operation on adjacent property owned by Granter' predecessor in title, Harold MacQuinn, Inc. and that as further consideration for the purchase of this property from Granter, Grantees, their heirs, successors and assigns agree that they will not object to such extraction operations, including traffic to and from the gravel pit, nor express concern over such operations to any local, state or federal governmental agency or officer or third party.

Together with all rights, easements, privileges and apportenances belonging to the granted estate.

This was entered for a property adjacent to the Asher Pit. In my opinion it is a clear attempt to keep local code enforcement at a distance and hamstrung with respect to code enforcement. This was entered subsequent to the pit renewal permit in January of 2014. The permit was issued on condition that six Gravel Pit Ordinance standard be met. (Planning Board Minutes). It appears that MacQuinn Inc was anticipating not being in compliance and my reading of planning Board Minutes seems to bear this out.

The latest seems to be the restoration of the slopes. Hydroseeding was a farce and the latest attempt doesn't appear to be much better. The use of engineered soil is creative and a clear indication of trying to beat the intent of the ordinance, but not necessarily the letter. Having spent twenty years managing advanced technology projects, I can attest that there is always a difference between theory and reality. It is my opinion that the renewal permit should be held in abeyance until grass actually grows and the slopes are graded to safe angle. The remediation is supposed to lead to repurposing of the property and the slopes are not natural or safe.

All this leads to Cousin's Hill in the following way. If the town government had been following the case as town ordinance have directed, MacQuinn would be in compliance at this point. On the other hand, MacQuinn did not exhibit the responsibility of a good corporate citizen by voluntary compliance. It appears they they were doing damage control in anticipation of non-compliance. Their actions place into question their ethics trustworthiness.

It is my recommendation that the permit application be denied until the town can demonstrate the ability to enforce ordinances and the company can demonstrate that they are worthy of being allowed to operated in the town. Furthermore, I feel that the Asher pit should be closed pending proof of compliance. I believe that his approach is supported by state law.

W.M. Shubert

Walter Jean Grenier II 3 Tinker Meadow Way Ellsworth, Maine 04605

September 27, 2017

To the Town of Lamoine

Residents, fellow neighbors, and friends of Lamoine, my name is Walter Jean Grenier II. I was, until June of 2016 a very proud resident of Lamoine for 17 years. When my wife passed away in June 2016, we had our home up for sale to downsize and did finally sell it that year, after 5 years of being on the market. In the process of selling it, my wife and I had numerous conversations with real estate brokers regarding the market conditions at that most recent time, wondering outside of the federal or state economies, what else is affecting our sale?

One of the troubling points that was repeatedly discussed, during an open house for real estate agents at our home, were the gravel pits in Lamoine and the affect that they had during that time period, for people wanting to relocate to Lamoine. It was stated "People did not want to live near a gravel pit", as well as have the attendant issues of noise and heavy truck traffic. Another issue as well was the adverse effect of lowering the real estate values of property and homes. One broker told me that her clients would be more willing to look in Blue Hill rather than Lamoine, due to the perception of Lamoine as "being a gravel pit town". This was a more troubling statement for us due to the broadened and scope of understanding touching on real estate brokers and their prospective clients, beyond the Lamoine market into adjoining markets. The questions in my and my wife's minds were: (1) would be able to sell our home in Lamoine, (2) if we did, how much would we have to discount it?

The problems are still genuine. They currently pose risks for Lamoine residents on being able to hold on to secure real estate investments and not have their home equity eroded by the threat the gravel industry diminishing their future either by the actual physical imposition of a gravel pit in the proximity of their property or the threat of one being located nearby in near future. There may be perhaps an even worse effect in the minds of future home and land owners to the Town of Lamoine, which would be one of the town hosting the growth of development of gravel pits versus the promotion of real estate growth and development of homes and prosperous neighborhoods.

Sincere

Walter Jean Grenie



Maine Department of Transportation Driveway/Entrance Permit

Permit Number:12590

Location: Route: 0184X, Douglas Hwy

Owner:

Harold MacQuinn Inc

Municipality: Lamoine

Address:

Telephone:

PO Box 789

(207) 667-4653

County: Hancock

Ellsworth, ME 04605

Tax Map: 3; Lot Number: 33

Culvert Siza: "

Culvert Type: N/R

Culvert Length: '

Date of Permit: 11-DEC-12' Appr.Entrance Width: 30'

In accordance with rules promulgated under 23 M.R.S.A., Chapter 13, Subchapter I, Section 704, the Maine Department of Transportation (MaineDOT) approves a permit and grants permission to perform the necessary grading to construct, in accordance with sketch or attached plan, an Entrance to [a] Gravel Pit at a point 970' N from Shore Rd, subject to the Chapter 299 Highway Driveway and Entrance Rules, standard conditions and special conditions (if any) listed below.

Conditions of Approval:

This permittee acknowledges and agrees to comply with the Standard Conditions of Approval attached hereto and to any Specific Conditions of Approval shown here.

- * The approved entrance shall be 30 feet wide with 25 foot radii to safely accommodate truck traffic.
- * The owner must lower and cut earth bank south of the proposed entrance to utility pole #112 in order to achive minimum truck sight distance and also to the north to maximize sight lines per the application submitted by Stephen R. Salsbury.
- * The proposed entrance must be paved a minjmum-of 30 feet from edge of pavement on or before 10/31/13

* The proposed entrance must be level for 30 feet from edge of pavement.

Bruce W. Mattson, P.E. Region Traffic Engineer

> February 1 2013 Page 234



Maine Department of Transportation Driveway/Entrance Permit

100

Permit Number: 12589

Harold MacQuinn Inc

Owner: Address:

PO Box 789

Ellsworth, ME 04605

Telephone:

(207) 667-4653

Location:

Route: 0184X, Douglas Hwy

Municipality: Lamoine

County: Hancock

Tax Map: 3; Lot Number: 33

Culvert Size: 15°

Culvert Type: plastic

Culvert Length: 50'

Date of Permit: 11-DEC-12'
Appr.Entrance Width:30'

In accordance with rules promulgated under 23 M.R.S.A., Chapter 13, Subchapter I, Section 704, the Maine Department of Transportation (MaineDOT) approves a permit and grants permission to perform the necessary grading to construct, in accordance with sketch or attached plan, an Entrance to [a] Gravel Pit at a point 1675' N from Shore Rd, subject to the Chapter 299 Highway Driveway and Entrance Rules, standard conditions and special conditions (if any) listed below.

Conditions of Approval:

This permittee acknowledges and agrees to comply with the Standard Conditions of Approval attached hereto and to any Specific Conditions of Approval shown here.

* The approved entrance shall be 30 feet wide with 25 foot radii to safely accomodate truck traffic.

* The owner must remove the earth bank to the north of the proposed entrance to match the slope at the 45 mph sign and/or utility pole # 104 in order to achieve minimum safety truck sight distance.

* Extend the existing culvert at the south end to xemain away from utility pole # 106. Place rip rap at the end

* The proposed entrance must be paved a minimum/of 30 feet from edge of pavement on or before 10/31/13.

Approved by:

Bruce W. Mattson, P.E. Region Traffic Engineer

JIM WEBS Wastia

COMMITTEE ON MEMBERS SHAVIORS COMMITTEE ON FOLIATIONS COMMITTEE ON WITHOUT AS FALAS

JOHNE SCONORED COATELLERS:

White State Some

500 SE OCT 1 200

WASHINGTON OFFICE:

V/Asian, pack, 0/01000 (3.63) 924-4604

WASHINGTON, DC 20510-4695

September 29, 2008

R. David Laurrell Campbell County Administrator PO Box 100 Rustburg, VA 24588

Dear Mr. Laurrell:

Enclosed is correspondence from my constituents in reference to a matter to go before the Campbell County Board of Supervisors for consideration. Their letter concerns Boxley Materials' application to rezone parcel 41-A-120 from Residential Single Family/Agricultural to Heavy Industrial.

Please review their letter and give every appropriate consideration and review my constituents' request in accordance with all rules, regulations and laws applicable to this request. Your attention to this matter is greatly appreciated.

Please send any correspondence to my Roanoke office. In your reply, please reference Dwight S. and June E. Beaver.

With kind regards, I remain

Sincerely,

Jim Webb

United States Senator

JW:dl Enclosure

Copy: Mr. and Mrs. Dwight S. Beaver

U.S. Senator Jim Webb Regente differ 9140 Charmers differ Roanoke, dis delita (640) 772-62-6

September 24, 2008

5630 Dearborn Road Evington, VA 24550

(434) 660-6603 Sbeaver001@hotmail.com

The Honorable Jim Webb 3140 Chaparral Drive Building C, Suite 101 Roanoke, VA 24018

Dear Mr. Webb:

On October 6, Boxley Materials' application to rezone parcel 41-A-120 from Residential Single Family / Agricultural to Heavy Industrial will come before the Campbell County Board of Supervisors for consideration. We respectfully solicit your support in our efforts to oppose this application because of (1) the negative impact that Boxley's new quarrying operation will have on property values within a three-mile radius of that parcel and (2) the lack of positive economic impact that the quarry will bring to Campbell County.

A recent study commissioned by the Richland Township Planning Commission (enclosed) using the findings of Auburn economics professor Diane Hite, has shown a definite statistical correlation between property distance from a gravel pit and that property's sale price. Specifically, properties adjacent to the gravel pit experience up to a 30% reduction in sale price with prices increasing one percent for every ten percent increase in distance from the operation. Property values at one mile are reduced 14.5%, property values at two miles are reduced 8.9%, and property values at three miles are reduced 4.9%.

According to Campbell County GIS data, the assessed value of the real estate within one mile of the Boxley parcel is approximately \$30 to \$35 million. Assuming that property values within one mile of the parcel will be devalued an average of 22%, the aggregate loss in equity for residents within a mile of the parcel could be as high as \$7 million. Although the total assessed value of the real estate beyond one mile of the site has not been calculated at the time of this writing, it is not unreasonable to assert that the aggregate loss in property values for residents who live within a three-mile radius exceeds \$10 million.

As part of the application process, Boxley has submitted an economic impact study. Careful analysis of the economic benefits that Boxley asserts shows that the citizens of

Campbell County get very little in return for Evington's loss. According to Boxley's economic impact study:

Tax revenues to Campbell County will amount to \$46,318 during the 15-year site construction period. The revenue will be collected in the form of BPOL, sales tax, and machine tool tax. The average yearly collection will be \$3,088. This amount is approximately 0.0076% of the projected taxes and fees collected for fiscal 2009. Needless to say, the amount is insignificant.

- 2. A total of \$23.6 million will be spent in Campbell County over 15 years for quarry site construction. This amounts to an average yearly expenditure of \$1.6 million. This assertion assumes that every employee and contractor is a resident of Campbell County and that every vendor and supplier is located in Campbell County. This simply will not be the case. Much of the expertise and materials simply cannot be acquired in Campbell County for a project of this nature. The study also assumes that all contracts will be awarded to Campbell County bidders. Boxley's \$1.6 million can be easily replaced by the construction of eight single-family homes per year in the Evington area. This construction would benefit the building trades, create jobs, and generate fees and taxes associated with home construction.
- 3. A total of \$220,000 to \$350,000 in tax revenue will be gained from the ongoing quarry operation. But comparable amounts of tax revenue can be gained by the construction of 25 new homes annually over the next 15 years. And nearly a third of those new homes would come to fruition quickly in the Troublesome Creek subdivision if it were not for the specter of the rock quarry hanging over Evington.

When residents and developers purchased residential/agricultural properties in Evington, they had a reasonable expectation that future zoning changes would not adversely impact their property values. Changing from residential/agricultural to heavy industrial zoning with a special use permit for quarrying is the most radical change possible and will destroy the character of the area for hundreds of years. Most people in Evington have very little other than their property and the devaluation of that property would be devastating for them. We respectfully ask that you contact the Campbell County Board of Supervisors and encourage them to vote against this rezoning.

Thank you for your time and consideration. And thank you for your service to Campbell County and the Commonwealth of Virginia.

Sincerely,

Dwight S. "Steve" Beaver

June E. Beaver

An Assessment of the Economic Impact of the Proposed Stoneco Gravel Mine Operation on Richland Township

August 15, 2006

George A. Erickcek Senior Regional Analyst W.E. Upjohn Institute for Employment Research

W.E. Upjohn Institute for Employment Research

300 South Westnedge Avenue ● Kalamazoo, Michigan 49007-4686 ● U.S.A. Telephone (269) 343-5541 ● FAX (269) 342-0672

An Assessment of the Economic Impact of the Proposed Stoneco Gravel Mine Operation on Richland Township

George A. Erickcek Senior Regional Analyst W.E. Upjohn Institute for Employment Research

Executive Summary/Introduction

This report, which was completed at the request of the Richland Township Planning Commission, provides an estimation of the economic impact of the proposed Stoneco Gravel Mine Operation on Richland Township. The following impacts are assessed in this study:

- 1. The potential impact on residential property values in Richland Township.
- 2. The potential employment impact of the proposed gravel mine on the area's economy.

In addition, we carefully reviewed the economic impact reports provided by Stoneco for consideration.

In the preparation of this impact analysis we used nationally-recognized modeling techniques that are the standard for academic research.

We estimate that the proposed gravel mine will have a significant negative impact on housing values in Richland Township. Once in full operation, the gravel mine will reduce residential property values in Richland and Richland Township by \$31.5 million dollars, adversely impacting the values of over 1,400 homes, which represent over 60 percent of the Richland residences.

In addition, the mining operation will have an insignificant impact on area employment and personal income. At most, we estimate that only 2 additional jobs will be created in Kalamazoo County due to the mining operation. The mining operation serves the local market, and analysis based on the Institute's econometric regional model for the Kalamazoo region shows that it will bring in an insignificant amount of new income into the area's economy, \$58,000. Although the mine will employ an estimated 5 to 10 workers and require drivers to haul an estimated 115 to 120 truck loads of gravel per day,

¹ The report was completed without charge as part of the W.E. Upjohn Institute's community service commitment. The Institute has prepared requested reports and analyses for the City of Kalamazoo, the City of Hastings, the City of Battle Creek, the City of Grand Rapids as well as other local governmental units and school districts.

most all of these jobs would simply "displace" any employment growth in the county's 15 existing gravel pits.

Stoneco has not established a need for new aggregate capacity. Kalamazoo County is currently serviced by 15 gravel operations, and in recent years, employment in the county has been shrinking and the population has been stagnant. Consequently, there is no prima facie case that new capacity is needed. To definitively determine whether such a need exists, we would need to have information on projected demand for aggregated material in the county and capacity of the gravel pits currently servicing the county.

Finally, a careful evaluation of the five impact studies presented by the Stoneco finds that their methodologies are seriously flawed, and thus conclusions drawn from the analyses are invalid.

Qualifications

The W.E. Upjohn Institute for Employment Research is an internationally-recognized independent, non-profit economic research organization established in 1945 for the sole purpose of conducting research into the causes and effects of unemployment and measures for the alleviation of unemployment. The Institute currently has a staff of 60 including 10 senior-level economists, and its research agenda includes issues on the international, national, state, and local levels.

For the past 20 years the W.E. Upjohn Institute has maintained a strong research focus on west Michigan which includes

- The publication of its quarterly economic report: Business Outlook for West Michigan.
- The preparation of short- and long-term employment forecasts for all of the metropolitan areas in west Michigan including Kalamazoo, Battle Creek, Grand Rapids, Muskegon, and Holland.
- The completion of numerous economic impact reports and economic development strategies for communities in Michigan.

George Erickcek, the Institute's Senior Regional Analyst, was the lead researcher for this study. He received his Masters of Economics at the University of Pittsburgh and has been with the Institute since 1987. George has prepared numerous economic impact, benchmarking, and forecasting studies for the west Michigan region, and has conducted research on the national and international level.

Methodological Approach to Estimating the Impact on Housing Values of the Proposed Gravel Mine

Many factors influence housing prices. These include, of course, the characteristics of the house or dwelling unit, such as size, age, lot size, number of bedrooms and bathrooms, as well as its upkeep. In addition, the house's proximity to amenities such as a lake or pleasing neighborhood or "disamenities" (e.g. landfills, pollution sites) can have a substantial impact on its price.²

Economists have found that "hedonic pricing models" are extremely useful in isolating the contribution of specific factors on the price of housing, as well as other goods. First developed by University of Chicago economist Sherwin Rosen in 1974, hedonic pricing models use a statistical regression technique that allows the researcher to estimate the impact of one factor, e.g. the proximity of a neighborhood park, on the value of a house while holding all of the other factors impacting the house's value constant. There is an extensive literature applying hedonic pricing models to study the effects of environmental disamenities on residential property values. These studies generally show that proximity to landfills, hazardous waste sites, and the like has a significant negative effect on the price of a residential property.³

Professor Diane Hite, an economist who has published widely in the area of property value impact analysis, has recently applied hedonic pricing methodology to study the effects of a gravel mine on nearby residential values. This appears to be the only rigorous study to date of gravel mine impacts on property values. Her study is based on detailed data from Delaware County, Ohio that were collected by the Ohio State University for the purposes of studying land use planning.

Hite examines the effects of distance from a 250-acre gravel mine on the sale price of 2,552 residential properties from 1996 to 1998. Her model controls for a large set of other factors that determine a house's sale price, including number of rooms, number of bathrooms, square footage, lot size, age of home, sale date, and other factors specific to the locality, so that she can focus solely on the effect of proximity to the gravel mine on house values. She finds a large, statistically significant effect of distance from a gravel mine on home sale price: controlling for other determinants of residential value, proximity to a gravel mine reduces sale price. Specifically, Hite reports that the elasticity of house price with respect to distance from a gravel mine is .097, implying that a 10 percent increase in distance from the gravel mine is associated with slightly less than a 1 percent increase in home value, all else the same (Appendix A). Conversely, the closer the house to the proximity to the mine, the greater the loss in house value.

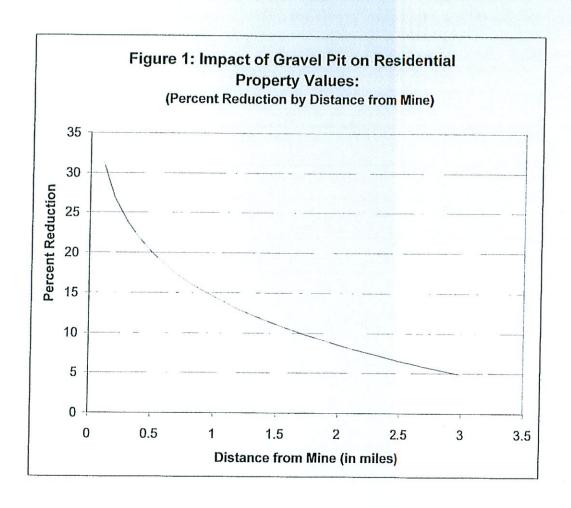
² In a recent study of the impact of housing programs in the City of Kalamazoo, we found that moving a house from one neighborhood to another can add or subtract as much as \$20,000 from its value.

³ For reviews of some of this literature, see Arthur C. Nelson, John Genereux, and Michelle Genereux, "Price Effects of Landfills on House Values," *Land Economics*, 1992 68(4): 359-365 and Diane Hite, Wen Chern, Fred Hitzhusen, and Alan Randall, "Property-Value Impacts of an Environmental Disamenity: The Case of Landfills," *The Journal of Real Estate Finance and Economics* 22, no. 2/3 (2001): 185-202

⁴ Diane Hite, 2006. "Summary Analysis: Impact of Operational Gravel Pit on House Values, Delaware County, Ohio," Auburn University.

⁵ This estimate is based on a constant elasticity model specification. At the Upjohn Institute's request, Professor Hite tested the sensitivity of these findings to model specification, and in all specifications finds a large, statistically significant negative effect of proximity to gravel pit on house prices. The simulations for Richland Township reported below are based on the estimates from the constant elasticity specification and yield slightly lower estimated negative property value impacts than those based on models using other functional forms. We consider this number to be a conservative estimate.

Figure 1 displays the estimated effects of distance from the gravel pit on house price. A residential property located a half mile from the gravel mine would experience an estimated 20 percent reduction in value; one mile from the mine, a 14.5 percent reduction; 2 miles from the mine, an 8.9 percent reduction; and 3 miles from the mine, a 4.9 percent reduction. These estimates are similar to estimates published in academic journals on the effects of landfills on nearby property values.



The loss in property value results from the negative consequences of the mining operation and reflects the deterioration in the area's quality of life due solely to the operation of the gravel mine. In other words, the loss in house value is a way to quantify in dollars the deterioration in quality of life, as capitalized in the price of the house. It captures the price reduction the homeowner would have to offer to induce a new buyer to purchase the property. Even if homeowners do not move as a result of the gravel mine, they will lose homeowner equity as the potential sale price of their house is less. Therefore, regardless of whether or not a person actually sells their property, it measures

⁶ Only those owning property at the time of the establishment of the gravel mine would experience a loss in equity. Those purchasing property near an established mine would not experience an equity loss because any negative effects from the mine's operation would have been incorporated into the purchase price. By implication, few property owners near long-established mines could claim loss of property value from the mine because few would have owned the properties at the time the mine went into operation.

the adverse effects in their quality of life in being subjected to the disamenities introduced into the area by the gravel mine.

The policy implications of Hite's study are clear: because property value losses are higher the closer to the gravel mine, all else the same, new sites should be located far from existing residences so as to minimize adverse consequences for homeowners.

Simulation of Gravel Mine on Residential Property Values in Richland

Utilizing the estimates from the Hite study and data on 2006 assessed values provided by Richland Township, the Upjohn Institute simulated the effects of the proposed gravel mine on residential property values in Richland Village and Richland Township. Our analysis is based on 2005 assessed values of single-family homes in Richland Township and Richland Village obtained from the Township's assessor office in June and July. In total 2,319 single-family homes, 88.7 percent of all single-family residences in the township and village, were geo-coded using the ArcView® mapping program, manually matched using Yahoo® maps and, finally, through drive-by inspection of addresses. Once all of the homes were mapped, the distance between each of the residences and the closest boundary of proposal Stoneco gravel mine was determined.

As shown in Table 1, more than 1,400 homes will be negatively impacted by the proposed gravel mine with the total cost reaching \$31.5 million dollars.

Estima	ated Impact	Ta on Housing Values	ble 1	d Stoneco Gr	avel Mine
Distance (miles from Stoneco Site)		Estimated Loss in Value	Distance (miles from Stoneco Site)	Number of Houses Affected	Estimated Loss in Value
0.1 0.2 0.3 0.4 0.5	2 3 2 9 3	\$211,703 \$106,428 \$134,894 \$522,981 \$389,319	1.6 1.7 1.8 1.9	73 128 99 70 34	\$1,207,011 \$2,500,456 \$1,630,149 \$1,146,761 \$633,720
0.6 0.7 0.8 0.9	8 24 25 27 22	\$598,518 \$831,338 \$798,108 \$1,085,190 \$918,374	2.1 2.2 2.3 2.4 2.5	105 98 99 72 34	\$952,068 \$1,311,040 \$2,843,845 \$2,699,584 \$912,133
1.1 1.2 1.3 1.4 1.5	75 62 45 32 30	\$2,428,602 \$1,688,031 \$1,146,920 \$824,928 \$712,731	2.6 2.7 2.8 2.9 3	12 23 80 55 70	\$377,548 \$373,873 \$939,861 \$944,061 \$655,846
		-	Γotal	1,421	\$31,526,020

While Hite's original study covered a 5-mile radius from the gravel mine in Ohio, we chose to examine only a 3-mile area from the boundaries of the proposed Stoneco site. Only properties located in Richland and Richland Township are included. Property values in other townships, notably Prairieville Township, also could be adversely affected by the location of a gravel mine near its border with Richland Township but were not included in the study. In addition, the analysis does not consider possible effects on commercial property. Our estimates do not factor in the likely negative impact on property values along the truck routes used for the mine. Finally, although Stoneco has proposed to reclaim some of the land for a lake and residential development, its proposed timeframe for this development would occur too far into the future to mitigate adverse property value impacts for current Richland area residents.

Employment and Personal Income Impact

Stoneco estimates that 5 to 10 permanent jobs will be created at the proposed mine. In addition, truck drivers will be required for the 115 to 120 truck loads of gravel that will be hauled from the mine daily.

To measure the potential employment and income impact of the gravel mine, we used the Institute's econometric regional model of the Kalamazoo area. Because of its weight and low-value, gravel is hauled for only short distances. It is not a part of the area's economic base that brings new monies into the area. Therefore, it is an activity that does not generate any significant new income or employment opportunities. We estimate that only 2 additional new jobs will be created in Kalamazoo County due to the gravel mine and personal income in the county will increase by only \$58,000. In short, the jobs created at the gravel mine will displace jobs elsewhere in Kalamazoo County or the immediate region. The proposed mine would not result in any significant net benefit to the area from job or income creation.

Need for the Proposed Mine

Adverse economic effects of the proposed gravel mine to the Richland community must be balanced against the county's broader needs for aggregate material for road construction. Currently, 15 gravel mines operate in Kalamazoo County according to the Kalamazoo County Planning Department (Table 2). Stoneco's application materials do not provide any evidence for the need for additional capacity. Statistics were cited on projected needs, but no evidence was presented as to whether existing capacity could cover anticipated needs.

The need for additional capacity of gravel production is not supported by current and projected population or employment trends in Kalamazoo County. Population growth in Kalamazoo County has been modest during the past five years, and well below the national rate. From 2000 to 2005, population in the county increased annually at a rate of

⁷Hite's statistical analysis intentionally includes homes at a distance deemed unaffected by the gravel operation. Our choice to study the impacts up to 3 miles is based on Nelson, et al. (1992) and the fact that estimated impacts for individual homeowners are still relatively large out to three miles in all of Hite's models.

The Upjohn Institute maintains a regional economic impact and forecasting model for the Kalamazoo metropolitan area which was built by Regional Economic Models Incorporated (REMI) especially for the Upjohn Institute. The REMI modeling approach, which incorporates an input-output model with a forecasting model and a relative cost of production model, has been repeatedly reviewed and upheld as the industry standard.

below 0.2 percent, compared to 0.9 percent nationwide. An analysis of the individual components of population change—births, deaths, net migration—shows that individuals and households, on net, are leaving the county. From 2000 to 2005, the county's population increased by 6,342 individuals due to number of births surpassing the number of deaths. However, on net, 4,150 individuals moved out of the county.

Table 2

Owner Name	azoo County Gravel Pit Site Address	Site Township
Aggregate Industries	C Ave. Near 6th St	
Art Austin	6287 K Avenue	Comstock
Triple B Aggregates	2702 Ravine Rd.	Kalamazoo
Thompson McCully Co	3800 Ravine Rd.	Kalamazoo
Byholt, Inc.	1600 Sprinkle Rd.	Brady
Byholt, Inc.	4th St	Prairie Ronde
Fulton Brothers Gravel	4th St	Prairie Ronde
Balkema Excavating	8964 Paw Paw Lk.	Prairie Ronde
Balkema Excavating	6581 E. K Ave	Comstock
Balkema Excavating	4274 Ravine Rd	Kalamazoo
Balkema Excavating	40th St. & I-94	Charleston
Balkema Excavating	14500 E. Michigan	Charleston
Balkema Excavating	15600 E. Michigan	Charleston
Consumer Concrete	10328 East M-89	Richland
Consumer Concrete	700 Nazareth Rd	Kalamazoo

Source: Kalamazoo County Planning Department July 2006

During the same time period, employment declined by 3.4 percent, a loss of 5,000 jobs. The Michigan Department of Labor and Economic Growth estimates that from 2002 to 2012, total employment in Kalamazoo and St. Joseph counties will increase at a rate of 0.8 percent—substantially below the 1.3 percent rate of growth projected for the nation as a whole. If this rate of employment growth holds true for the future, it will be not until 2010 that the county will reach its 2000 employment level.

Thus, economic projections do not, in and of themselves, indicate a need for expanded aggregate capacity. However, we emphasize that any definitive determination of need would require information on the capacity and life expectancy of existing area gravel pits, to which the Institute does not have access.¹¹

Review of Stoneco's Property Value Impact Analysis

The Environmental Study submitted by Stoneco in connection with its special use permit application concludes that gravel mining operations have no adverse impact on the value of nearby properties. This conclusion is based on five reports included in Appendix J of Stoneco's Environment Study:

⁹ U.S. Census Bureau.

U.S. Census Bureau. Furthermore, Internal Revenue Service (IRS) data from 2000 to 2004 shows that the majority of the individuals leaving the county are moving outside the greater Kalamazoo region. Note that whether there is a public need for additional capacity and whether it is in Stoneco's interest to develop a new mine are distinctly different issues. Stoneco has indicated that it would reduce its transportation costs by operating at the proposed Richland location. The degree to which any lower transportation costs translate into lower prices of aggregate material—and hence broadly benefit the public—versus increased company profits will depend on the competitive structure of the industry in this region.

- "Impacts of Aggregate Mine Operations: Perception or Reality?" Anthony Bauer, 2001.
- 2. "Social, Economic, and Legal Consequences of Blasting in Strip Mines and Quarries," Bureau of Mines, 1981.
- 3. "Impact of Rock Quarry Operations on Value of Nearby Housing," Joseph Rabianski and Neil Carn, 1987.
- 4. "Impacts of Rock Quarries on Residential Property Values, Jefferson County, Colorado," Banks and Gesso, 1998.
- "Proposed Fuquay-Varina Quarry: Analysis of Effect on Real Estate Values," Shlaes & Co., 1998.

These reports, in fact, fail to show that mining operations have no adverse impact on property values. None uses the standard methodology (the hedonic pricing model, described above) for evaluating property value impacts. Four of the five reports are based on flawed logic (as explained below) and hence cannot be used to draw any conclusions about property value effects. Only one report, commissioned by the U.S. Bureau of Mines, used a defensible methodology, although this report also suffers from serious limitations. Notably, this study found some evidence of adverse impacts of gravel mining operations on property values in six out of the seven sites examined.

The Bauer, Rabianski and Carn, Banks and Gesso, and Shlaes & Co. reports rely on one or both of the following types of observations to argue that gravel mining operations have minimal adverse impact on nearby property values:

- Over time, housing and commercial developments have moved closer to and sometimes adjacent to aggregate mine operations.
- For property values in the vicinity of mining operations that have existed for many decades, the rate of growth in property values does not increase with distance from the mining site.

In neither case do such observations have any bearing on the impact of aggregate mine operations on nearby property values.

1. Residential and commercial developments have located closer to and sometimes adjacent to mines over time.

Economic or real estate analysis does not predict that properties near mines have no value or no development potential. Rather, one would expect that nearby property values would be lower to compensate for any costs (e.g. noise, pollution, unsightly landscapes, and traffic congestion) associated with the mine. This reflects the common sense observation that property that is near sources of noise, pollution, traffic congestion, and blight will (all other things being equal) be less valuable. Of course, these lower property values, in turn, will help lure development, especially

¹²Bauer (2001) is a two-page statement that in large part summarizes the results of a 1984 study by a Michigan State University student.

Appendix A

This report's estimation of the potential impact on residential property values in Richland Township of a proposed gravel mine is based on the following regression model developed by Diane Hite, Professor of Economics, Auburn University. The model is based on a study of 2,552 homes in Delaware County, Ohio.

The results of the model are shown below. It is important to note that the model controls for house characteristics—bath, rooms and age, as well as location from the gravel pit.

Effect of Gravel Mine Operation on House Values Less than 5 Miles Delaware County, OH 1998-Log Distance Specification

		Nonlin	ear OLS S	ummary	of Residual	Errors		
Equation	DF Model	DF Error	SSE	MSE	Root MSE	R-Square	Adj R-Sq	Label
PRICE	8	2544	25816929	10148.2	100.7	0.2564	0.2544	PRICE

	Nonlinear OLS Parameter Estimates					
Parameter	Estimate	Approx Std Err	t Value	Approx Pr > t	Label	
a0	4.981671	2.2279	2.24	0.0254	Intercept	
al	0.097358	0.0162	6.00	<.0001	log(Miles from Gravel Pit)	
a2	0.00045	0.000056	8.00	<.0001	Sale Date	
a3	0.03527	0.00594	5.94	<.0001	Distance to Delaware City	
a4	-4.67E-6	4.204E-6	-1.11	0.2664	FAR (House Size/Lot Size)	
a6	0.248225	0.0384	6.47	<.0001	Total Baths	
a7	0.078881	0.0139	5.69	<.0001	Total Rooms	
a9	-0.00376	0.00110	-3.43	0.0006	Year Built	

Numbe Observa		Statistics for System		
Used	2552	Objective	10116	
Missing	0	Objective N	25816929	

The key finding of the model is a1 which can be interpreted as showing that a 10 percent increase in distance from the gravel mine is associated with slightly less than a 1 percent (0.97358) increase in home value, all else the same. Moreover the parameter is highly statistically significant. In other words, the chance of the gravel mine not having an adverse effect on housing values is one in a thousand.

IMPACT ON PROPERTY VALUES AND TAX BURDEN OF THE PROPOSED DENNISON-PRATT SCHIST QUARRY

CRITERIA 9(A) AND 9(K): THE IMPACT THAT THE PROJECT WILL HAVE ON THE GROWTH OF THE TOWN AND REGION, AND ITS IMPACT ON PUBLIC INVESTMENTS

1. PROPERTY VALUES AS A REFLECTION OF QUALITY OF LIFE

Reliable studies have shown that residential properties located within 4 miles of a newly-established quarry, gravel pit or landfill become less valuable than comparable properties located 5 miles or more away. The dollar amount of this loss in property value is an established way to measure the impact of a quarry on the quality of life at that property

Enjoying your property and keeping the aspects of your property that provide you with that quality of life, are rights enshrined in our state and federal laws. It comes down to this: Should one non-resident landowner and a non-resident businessman be allowed to conduct an activity profitable to them alone on a parcel of land within the Conservation District to the financial detriment of numerous other landowners? Or in fact, when viewed with a long-term (50-year) perspective, as I will suggest, to the financial detriment of current and future town officials and all the town's homeowners?

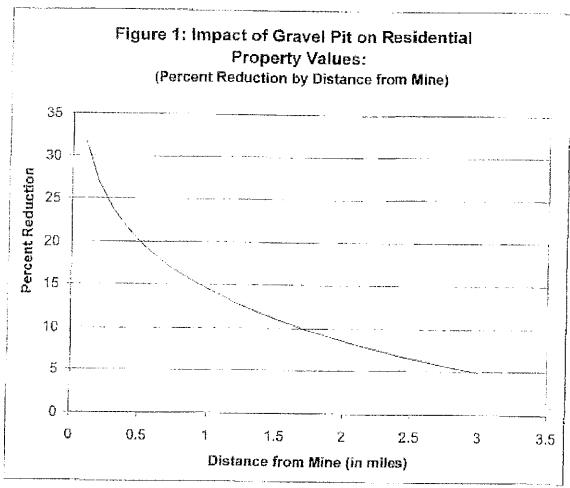
I respectfully suggest to the members of the ZBA that whether declines of individual homeowner property values ought or ought not be considered in determining whether to grant a conditional use permit, consideration of the overall long-term impact of this proposed quarry, for good or ill, upon all Halifax residents for the next 50 years would seem to be both relevant and appropriate.

If this project were judged likely on balance to be financially detrimental in the long run to the town's governing body and to a significant majority, if not all of its residents regardless of the location of their homes or land, and if no significant offsetting benefits (such as a meaningful increase of newly-employed workers at the facility or an increase in tax revenue sufficient to match the decline in available property taxes) were envisioned, then this project could be viewed as likely to have an overall long-term net negative impact on our community.

II. STUDIES THAT QUANTIFY THE EFFECT OF EARTH EXTRACTING OPERATIONS ON RESIDENTIAL PROPERTY VALUES

The impact of quarries on regional property values has of course been studied; the issue is not a new one. Many studies dating back to the mid-1970s have shown that proximity to landfills, gravel pits and the like has a significant negative effect on the sale prices of regional residential properties

Data collected by Auburn University Economics Professor Diane Hite provide a model for predicting the loss in property value of rural homes located within 4 miles of an industrial-scale earth-extracting operation, such as a gravel pit or rock quarry. The figure below displays the average effect of distance from a gravel pit on home value reductions. As might be expected, the closer the property, the greater its value loss, as reflected in its sale price upon property transfer.



Professor Hite and her colleagues found that on average, after establishment of an earth-extraction operation, residents selling homes located within a mile of that operation suffered a punishing 15-20% loss in final purchase income compared with occupants of "comps" located beyond 5 miles. On average, compared with such distant "comps", homes between 1-2 miles away endured a nearly 9% reduction in their sale price income, while owners of homes located from 2-3 miles away experienced a 5-8% relative loss in value. Projected sale loss estimates are provided on page 4. These outcomes were similar to those published in academic journals measuring the impact of landfills on nearby property values.

There is no reason to expect that our community would be spared a similar impact on subsequent home and property values if an industrial-scale schist quarry were permitted within Halifax. Furthermore, other long-term studies indicate that such home value loss persists for the duration of a quarry's operational life – proposed by the applicants in this case to be half a century.

As fiscally and psychologically damaging as such substantial and long-term property value declines would be, the noise, dust and potential travel risk of associated truck traffic for those who live along or nearby the schist haul route would further diminish residential quality of life

III. LONG-TERM IMPLICATIONS FOR TOWN OFFICIALS AND ALL TAXPAYERS

Applying the above modeling data to properties in Halifax, we can anticipate that if the Denison-Pratt Conditional Use Application were approved, during the 50-year operational life of the quarry, as homes were bought and sold, the cumulative, permanent loss in property values in Halifax could be over 5.5 million dollars. There are more than 200 Halifax properties within 3 miles of the proposed

quarry that would lose from 5% to 20% of their property value. Ten property owners* would lose 20% of their property value just because they had the bad luck to live within a half mile of the proposed quarry. Upon request, a detailed spreadsheet identifying these losses will be emailed to ZBA members.

Over time, as discounted sales of homes within 4-miles of the proposed quarry occur, each new owner could direct the town's listers to reduce their home's taxable fair market value to its sale price, a directive with which the listers must legally comply. As these property transfers occurred, perhaps even initially accelerating with the introduction of the proposed quarry, year after year the town's Grand List revenue base would steadily and irreversibly shrink.

Meanwhile, over the next 5 decades, the Select Board will need to reallocate sources of additional revenue within its increasingly constrained budget to cover the cost of additional road crew commitment, equipment use and materials necessary to repair and maintain those roads traveled by the quarry's trucks, particularly up and down Stark Mountain Road.

This added expense, coupled with the continuing decrease in the town's grand list valuation would require a compensatory increase in the town's tax rate, thus impacting all Halifax residents, sparing none, even all those living furthest away. Due to the reduction in their fair market value, household tax payments for homes within 4 miles would be lower than comparable homes situated outside this perimeter

Thus, ironically, if the proposed quarry were established here, the long term burden of progressively increasing tax bills would fall disproportionately upon those whose homes or land were further away from the quarry.

Respectfully submitted,

Nicholas H. Bartenhagen

14 July 2015

^{*} Properties located at 2077, 2378, 2456, 2505, 2510 and 2832 Deer Park Road; and at 324, 442, 475 and 995 Josh Road would lose 20% of their fair market value.

A 20% DROP IN SALE INCOME FOR HOMES WITHIN 1/2 MILE OF THE QUARRY

YRRENT VALUE OF HOME	VALUE OF HOME	COST TO HOMEOWNER
1½ MILE FROM QUARRY	IF QUARRY OPENS	OF SCHIST QUARRY
\$ 400,000	\$ 320,000	\$ 80,000
\$ 350,000	\$ 280,000	\$ 70,000
\$ 300,000	\$ 240,000	\$ 60,000
\$ 250,000	\$ 200,000	\$ 50,000
\$ 200,000	\$ 160,000	\$ 40,000
\$ 150,000	\$ 120,000	\$ 30,000
\$ 100,000	\$ 80,000	\$ 20,000

A 15% DROP IN SALE INCOME FOR HOMES LOCATED FROM ONE-HALF TO 1 MILE FROM THE QUARRY

VALUE OF HOME	COST TO HOMEOWNER
IF QUARRY OPENS	OF SCHIST QUARRY
\$ 340,000	\$ 60,000
\$ 297,500	\$ 52,500
\$ 255,000	\$ 45,000
\$ 212,500	\$ 37,500
\$ 170,000	\$ 30,000
\$ 127,500	\$ 22,500
\$ 85,000	\$ 15,000
	IF QUARRY OPENS \$ 340,000 \$ 297,500 \$ 255,000 \$ 212,500 \$ 170,000 \$ 127,500

A 10% DROP IN SALE INCOME FOR HOMES LOCATED FROM 1.5 - 2 MILES FROM THE QUARRY

	· · · · · · · · · · · · · · · · · · ·	w which it was the
CURRENT VALUE OF HOME	VALUE OF HOME	COST TO HOMEOWNER
AT 1.75 MILE RADIUS	IF QUARRY OPENS	OF SCHIST QUARRY
\$ 400,000	\$ 360,000	\$ 40,000
\$ 350,000	\$ 315,000	\$ 35,000
\$ 300,000	\$ 270,000	\$ 30,000
\$ 250,000	\$ 225,000	\$ 25,000
\$ 200,000	\$ 180,000	\$ 20,000
\$ 150,000	\$ 135,000	\$ 15,000
\$ 100,000	\$ 90,000	\$ 10,000

EXCERPTS FROM:

[1] PROPERTY VALUE IMPACTS OF AN ENVIRONMENTAL DISAMENITY: THE CASE OF LANDFILLS Diane Hite, Wen Chern, Fred Hitzhusen, Alan Randall

The Journal of Real Estate Finance and Economics 2000 22: 185-202

- Hite and colleagues demonstrated that welfare losses that result from decreased property values near an environmental disamentiy* (such as a landfill) can be of a significant magnitude (18 19%).
- They noted that those who were prompted to move because of a disamenity may experience constraints, such as
 the timing of move and decreased search time for their new home restricting their ability to bargain over property
 prices, both during sale of their current home and purchase of their new one.
- In the short run, property taxes are relatively less sensitive to the presence of disamenities than are property values.
- On the other hand, they observed that over the long run, by lowering property values, the presence of a long-term disamenity in a community may therefore undermine the its base.
- * Real estate jargon: "The unpleasant quality or character of something, especially of a location, causing a disadvantage or drawback."

[2] DO LANDFILLS ALWAYS DEPRESS NEARBY PROPERTY VALUES?

Richard C. Ready

Associate Professor, Department of Agricultural Economics and Rural Sociology Rural Development Paper No. 27 May 2005

Professor Ready reports that studies describing relationships between residential property values and proximity to a disamenity, such as a landfill have found that houses located near disamenities sell for lower prices than similar houses located farther away. A widely-cited study is that by Nelson, Generoux and Generoux (1992), who found that property values were depressed within 2 miles of the landfill studied.

Ready commented that solid waste industry representatives have pointed out that some landfill studies show no statistical relationship between proximity to this disamenity and house price, citing these studies as evidence that landfills need not have negative impacts on nearby property values (Gamble et al. 1982; Zeiss and Atwater 1989, Bouvier et al. 2000; Parker,2003). However, Ready observed that the results of these four studies were each based on relatively small sample sizes of house sales. Due to these small sample sizes in these studies, any valid relationship, positive, neutral or negative, could not be statistically proven.

[3] EFFECTS OF THE PROPOSED INDECK* FACILITY ON PROPERTY VALUE, LAND USE AND TAX REVENUES

G.S.Tolley, PhD.

Professor Emeritus of Economics, University of Chicago, & RCF Economic and Financial Consulting, Inc., May 2000 *Indeck Energy Services, Inc.

Professor Tolley cites a considerable body of research in urban economics, where the effects of power plants and other local disamenities have been analyzed with respect to their impact on residential property sales. "The studies leave no doubt that such disamenities have substantial effects on residential property values."

He adds: "There is a dynamic consideration to adding an initial disamenity to an area. A well-known tendency is that blight begets blight."

"If a disamenity is added that is of little or no benefit to a community, there is a tendency to take the attitude that the disamenity harm is already done and that adding other disamenities is simply putting like things together as is the blight-begets-blight tendency. The bar will be lowered on what is considered an acceptable disamenity for future additions. The area of the disamenity is cast into a continuing downward cycle of increasing disamenity in the future."

"As an area acquires more disamenities, the satisfactions of people living near the area are directly decreased for the reasons noted above. An additional effect is that the area gets a reputation of being undesirable. People living away from the area, who are not directly affected by the disamenities, view the area as undesirable. The satisfaction of people living near disamenities is further decreased because they acquire the reputation as living in an undesirable area."

"It is well known that people have become increasingly concerned generally about environmental disamenities, which would make them less willing to pay as much for properties where there are disamenities."

VERMONT ASSOCIATION OF REALTORS "FULL DISCLOSURE" POLICY

THE VERMONT PROPERTY OWNERS REPORT (VOLUME 27, ISSUE 6, PGS. 8-9, FEB-MAR 2013)

Though not legally compelled by any VT statute to do so, during all real estate transactions the Vermont Association of ealtors (V.A.R.) Full Disclosure Policy stipulates that: "The seller has a duty to disclose any issues he or she may be aware of. A potential buyer or his/her broker will often ask the seller to complete a Seller's Property Information Report (SPIR), in which the seller should disclose any problems as truthfully and accurately as possible."

The SPIR is a 4-page 22-item document developed by the V.A.R. in 1992 as a way to reduce lawsuits by buyers against sellers and brokers. Whether or not a SPIR was filled out, if it is later discovered the seller was aware of problems and did not disclose them to the buyer, it could be considered misrepresentation or omission under Vermont Consumer Fraud Act, 9 V.S.A. § 2451-2480, which prohibits "unfair or deceptive acts or practices ... in order to protect the public and to encourage fair and honest competition." 9 V.S.A. § 2451."

Full disclosure means being forthcoming about anything the other party should know regarding any material issues involving the transaction, especially if it may mean the difference between the prospective buyer entering or not entering the deal. In real estate transactions, most states require that real estate brokers and agents sign a full disclosure form listing everything material about the deal, under penalty of perjury. This means that if a real estate agent or broker either falsifies or fails to disclose important information, he or she could be charged with perjury.

Though Vermont agents or agencies are not legally bound to have potential home or property sellers complete a SPIR, they know that failing to do so exposes them to significant risk of lawsuit if after the sale, the buyer discovers something that significantly impacts the value of the home or land that had been known to but not disclosed by the seller. The concluding portion of page 4 of the SPIR follows. Note Question 22.

18.	Has there been significant damage to the Property or any of the structures from fire, wind, floods, earth movements or landslides?	Yes No Unknown
19.	Are there any underground storage tanks, including gasoline, propane and or fuel oil on the Property?	
20.	Have there been any underground storage tanks, including gasoline, propane and or fuel oil on the Property?	
21.	Has paint containing lead been used on the Property?	
22.	IS THERE ANYTHING ELSE THAT SHOULD BE DISCLOSED ABOUT THE PROPERTY?	
If th	e answer to ANY of the above questions is "YES," please explain in detail (attach additional sheets if necess	ary):
	· ·	

PERSONAL EXPERIENCE WITH SPIR

When placing our home on MLS in early 2014, abiding by 22-year old V.A.R. policy, our agent instructed us to declare in Question 22 the possibility that a quarry might become established on an abutting property.

She described the experience of another realtor in her firm. The prospective buyers backed out the morning of the closing when their attorney found that a permit had been requested from the town's planning commission by a neighbor to open an auto-repair shop. The sellers had known of this permit request but had not disclosed it to the realtor or entered it at Question 22 of the SPIR. Had the sale been completed, the sellers could have been sued for fraud or perjury.

IMPLICATIONS FOR HALIFAX RESIDENTS

If the quarry does receive an operational conditional use permit, this would require that for the next 50 years, Halifax residents hoping to sell their homes had best resist the temptation to check the "No" box at question 22. To do so may place them at risk for subsequent lawsuit by purchasers who only discovered after the sale that they had not been informed of such a disamenity within town that will likely increase their municipal tax burden. Such disclosure would protect the sellers and their realtor from adverse legal consequences after the sale though it might also prompt the prospective buyer to look for a "comparable" home elsewhere, thus driving off purchasers who could have tendered a decent and appropriate offer had permission not been given the quarry.